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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,877	09/08/2000	Manabu Nohara	041465-5086	2565

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EXAMINER

MEW, KEVIN D

ART UNIT PAPER NUMBER

2664

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/658,877

Applicant(s)

NOHARA ET AL.

Examiner

Kevin Mew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September, 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Detailed Action

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference character "13" in line 17 of page 12. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference character "S101" in line 17 of page 22. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference character "S102" of Fig. 6. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Higuchi et al. (EP 0,825,737 A1).

Regarding claims 1 & 4, Higuchi discloses a communicating apparatus (see Fig. 7) and a communicating method for performing an asynchronous communication with a base station (see Fig. 12), comprising:

a long code synchronized phase detector and a long code synchronized phase detection process (**a receiving device and a receiving process**, see element 80, Fig. 19A) for receiving a spread modulation input signal (**a receiving device and a receiving process for receiving a down link signal, which is transmitted from the base station**) in which a long code (**a division signal, see hatched portion in the received signal**, see Fig. 15) is inserted for each of long code period (**for each of constant time intervals**, see Fig. 15);

a long code synchronized phase detector and a long code synchronized phase detection process (**a detecting device and a detecting process**, see element 80, Fig. 19A) for performing correlation detection between a received spread modulation signal and the spreading code for spreading the received spread modulation signal, and deciding whether the long code (division signal) synchronization has been established or not by determining the maximum correlation power obtained as a result of the addition for each

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long code (**detecting division signals out of received down link signal, in phase to the constant time intervals**, see col. 6, lines 4-24 and col. 26, lines 5-21);

an adder and an adding process for adding correlations (**an adding device and an adding process for adding detected division signals**, see col. 26, lines 5-21 and element 59, Fig. 19B) based on the long code synchronized phase detection (**with matching phases for each of the constant time intervals**, see col. 25, lines 48-51) over a period that is the sum of each long code periods considered (**over a predetermined time duration, which is longer than the constant time intervals**, see col. 26, lines 19-21); and

a memory means and a storing process (see element 70, Fig. 22) for storing resultant correlation sums and timings (**a memory device and a storing process for storing accumulated additional values generated by said adding device**, see col. 27, lines 27-28), and after completing the detection at all timings (**over the predetermined time duration**), a maximum correlation value selector selects the maximum correlation sum and its timing which is made the synchronized timing (**perform synchronization capturing with the base station on the basis of the accumulated additional values added over the predetermined time duration**, see col. 27, lines 27-32).

Regarding claims 2 & 5, Higuchi discloses a long code synchronized phase detector and a long code synchronized phase detection process (**a detecting device and a detecting process**, see element 80, Fig. 19A) for performing correlations integration and correlation detection between a received spread modulation signal and the spreading code (division signal) for spreading the received spread modulation signal (**calculates a correlation between a signal correlated with the division signal and the received**

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down link signal, see col. 6, lines 4-24 and col. 26, lines 5-21), and deciding whether the long code (division signal) synchronization has been established or not by determining if the maximum correlation power obtained as a result of the addition for each long code exceeds the threshold value (**detects division signals out of received down link signal when the calculated correlation exceeds a predetermined threshold value**, see col. 6, lines 4-24, col. 14, lines 46-51, and col. 26, lines 5-21).

Regarding claims 3 & 6, Higuchi discloses a memory means and a storing process (**a memory device and a storing process**, see element 70, Fig. 22) for storing correlation sums and the respective timings (see col. 27, lines 27-28). Although Higuchi does not explicitly show the memory means comprises a plurality of memory areas, it is well known that a memory has a plurality of memory locations. Furthermore, it is inherent that each of the respective correlation sums would be stored in a separate memory location in the memory means before long code synchronization capturing is performed by the threshold value decision means (**memory device has a plurality of memory areas to store accumulated additional values with packing each of the accumulated additional values in respective one of the memory areas**, see element 48, Fig. 22).

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Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

US Patent 6,647,405 to Kuroiwa et al.

US Patent 6,426,949 to Zhou et al.

US Patent 6,526,039 to Dahlman et al.

US Patent 6,567,461 to Moon et al.


US Patent 6,381,264 to Lomp et al.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300.

The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo, can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


RICKY NGO
PRIMARY EXAMINER

KDM
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